Mechanically Stabilized Embankment

Mechanically Stabilized Embankment (MSE) is a soil reinforcement earth retaining system and is categorized as a special design system. It consists of precast concrete face panels, welded wire mat soil reinforcement and structure backfill material.

The Office of Structure Design has responsibility for the structural design and preparation of contract documents (PS&E) for this system.

See *Bridge Design Aids*, pages 3-8.1 thru 3-8.6 for design information and *Bridge Design Details*, Section 20, pages 20-19.1 thru 20-19.7 and 20-19.9 for details for use with Contract Plans.

Currently sound walls are not to be constructed directly above the precast concrete face panels of soil reinforcement systems. Sound walls may be constructed if they are offset a minimum of 5 feet from the face of the supporting soil reinforcement system.

Attachment A summarizes in a flow chart the implementation of PS&E for earth retaining structures as contained in the *Highway Design Manual.*

Attachment B outlines design responsibilities assigned to Districts, OSD, and Translab as contained in the *Highway Design Manual.*

Floyd L. Mellon

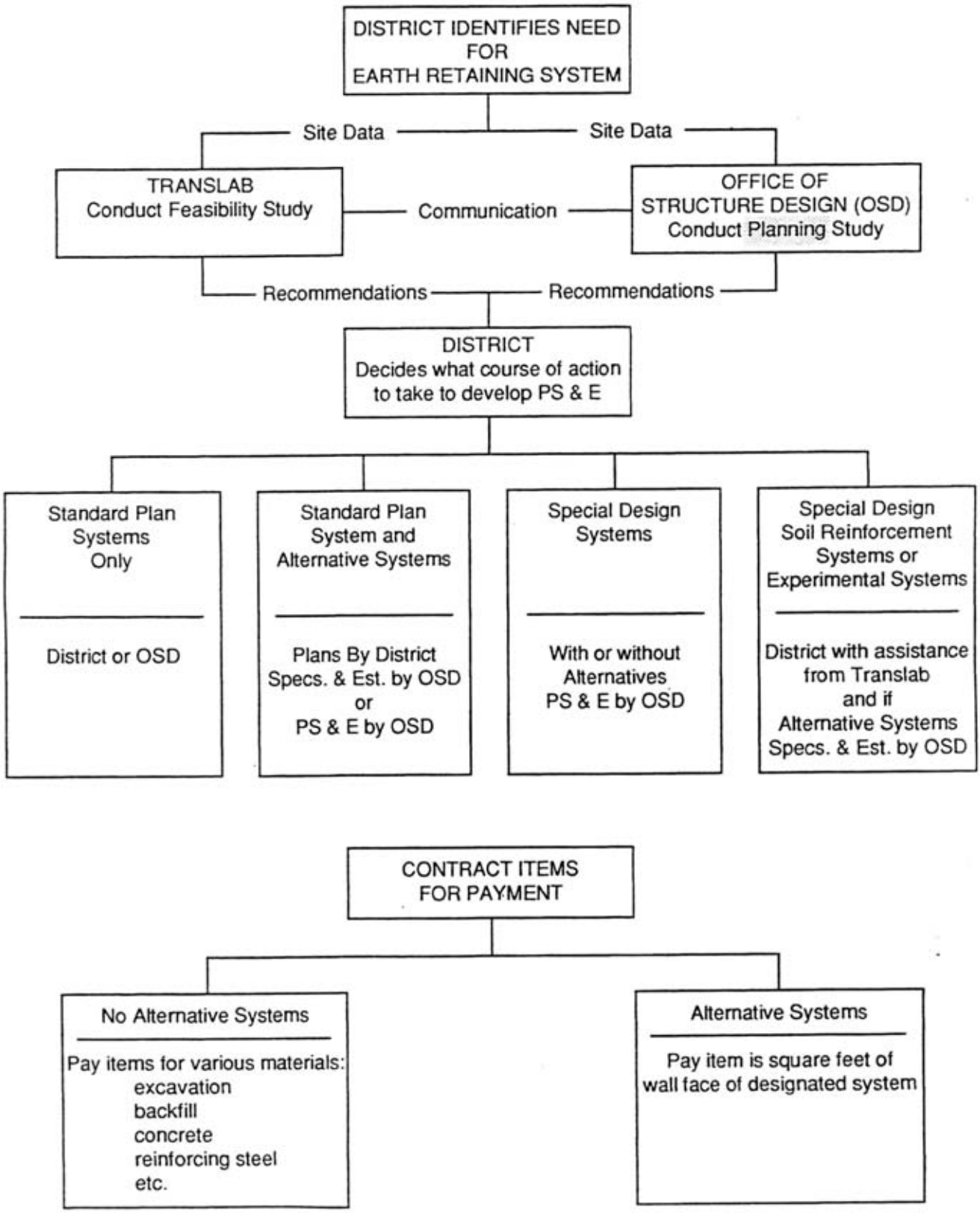
Guy D. Mancarti

JCM:tr
Attachments

Supersedes Memo to Designers 5-8 dated October 1988

Attachment A

Implementation of PS&E



Attachment B

Outline of Design Responsibilities

I. District

A. Determine Need for Earth Retaining System, Provide Site Data

B. Standard Plan Systems without Alternatives

C. Standard Plan Systems with Alternatives

D. Special Soil Reinforcement Systems and Experimental Systems

II. Office of Structure Design

A. Planning Studies

B. Standard Plan Systems

C. Special Design Systems

1. Includes Mechanically Stabilized Embankment and Soil Nail Wall Systems

D. Proprietary Systems

1. Approval

2. Working Drawing

E. Cost Reduction Incentive Proposals

III. Translab

A. Feasibility Studies

B. Foundation Investigation

C. Special Soil Reinforcement Systems and Experimental System

1. Includes Geotechnical Design for Soil Nail Wall System

D. Cost Reduction Incentive Proposals